Patient Medical Parameter
Acquisition and Distribution System

FIG. 1
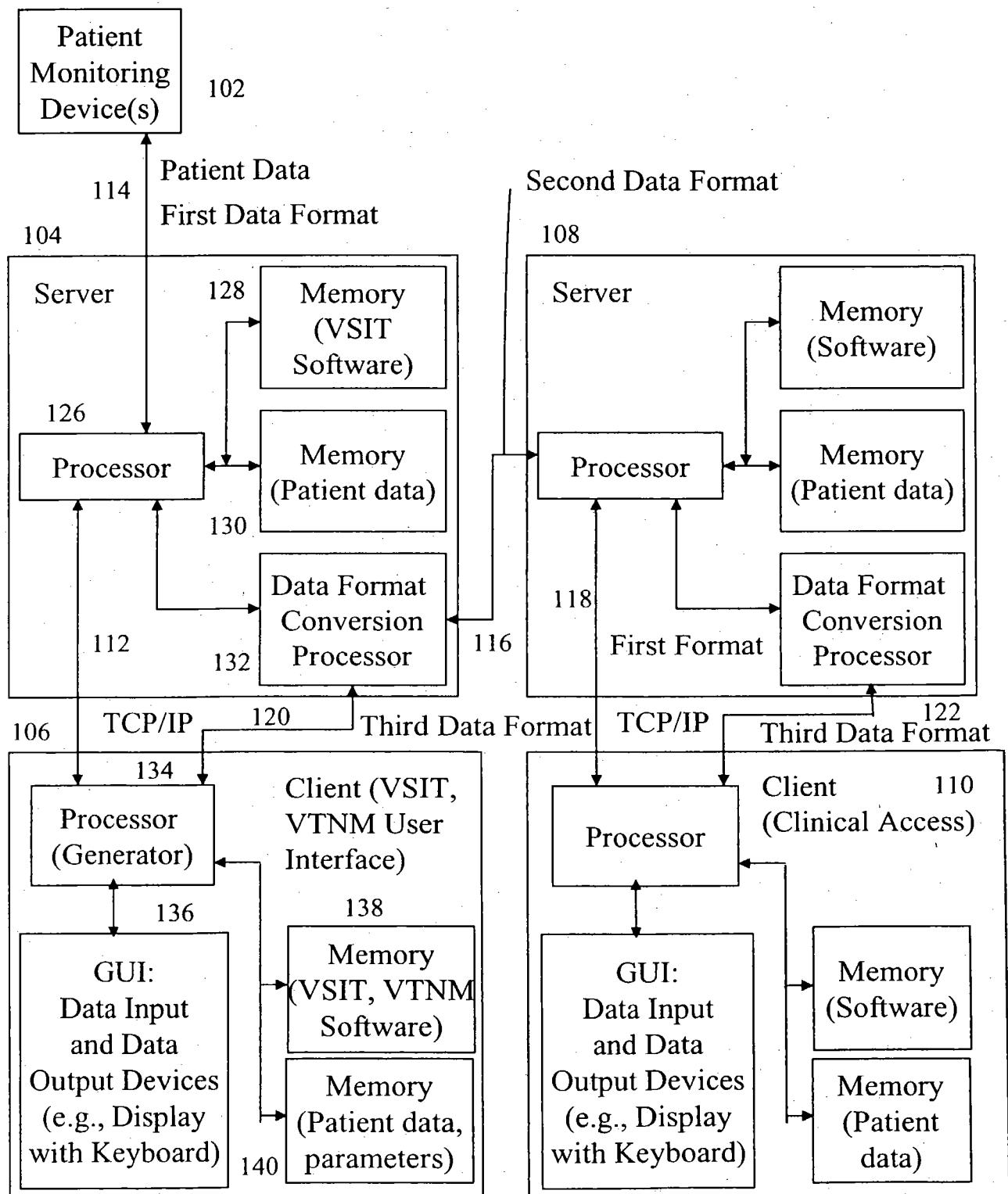
200
Vital Signs Integration Tool
(VSIT) Method

FIG. 2

Start   201

Configure a server to collect data,
representing a patient's vital signs.
(e.g., VentServ Method)   202

Identify the data to be
collected by the server.
(e.g., VentExec Method)   203

Configure a client to instruct the server
how to process the data.
(e.g., VentClient Method)   204
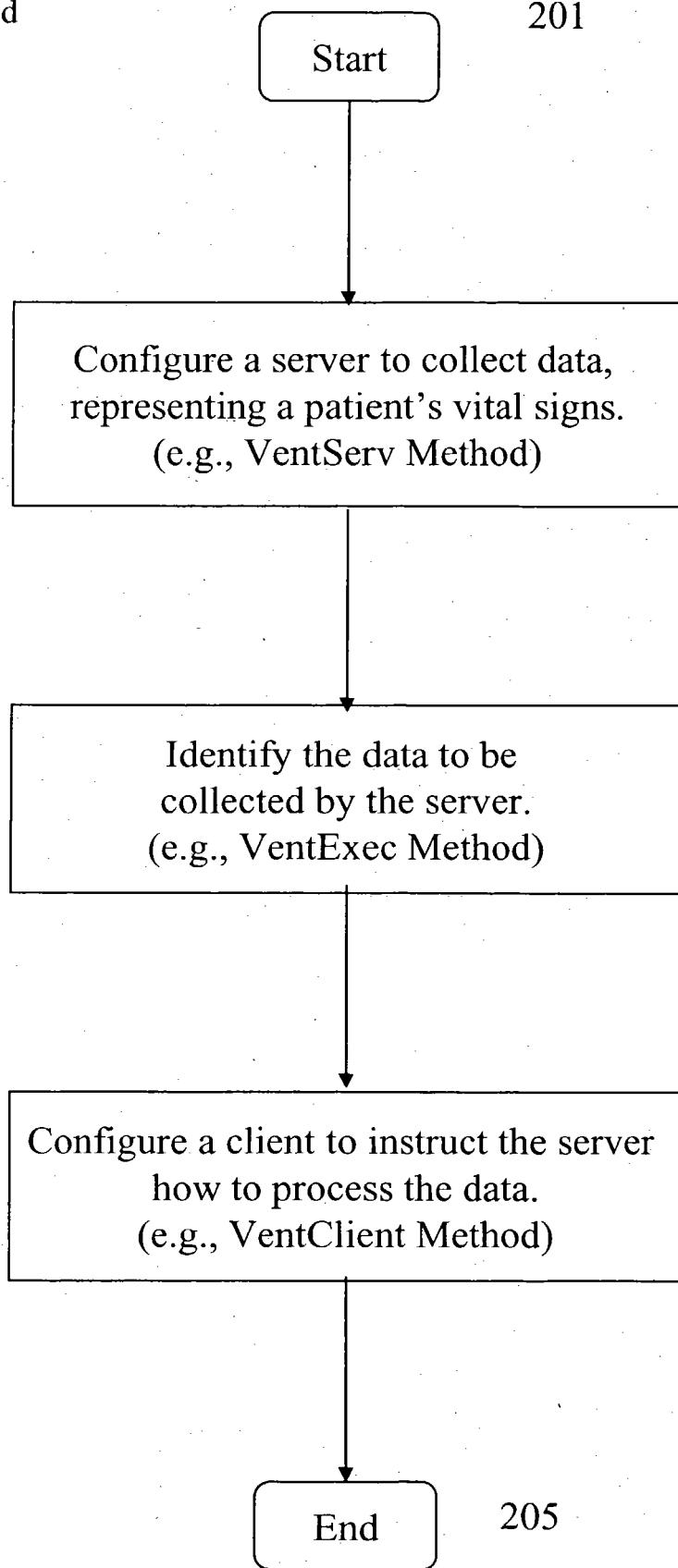
End   205

202
VentServ Method

FIG. 3

Start — 301

Select a Vital Statistic Integration Tool (VSIT) server program. — 302

Launch the VSIT server program. — 303

Select a patient's vital signs file. — 304

Open the patient's vital signs file. — 305

Start the server process. — 306

Confirm that the server process has started. — 307

End — 308

FIG. 4

203
VentExec Method

```
        ┌──────────┐
        │  Start   │  401
        └──────────┘
             │
             ▼
┌─────────────────────────────────┐
│ Select a VSIT executive program. │  402
└─────────────────────────────────┘
             │
             ▼
┌─────────────────────────────────┐
│ Launch the VSIT executive program.│  403
└─────────────────────────────────┘
             │
             ▼
┌─────────────────────────────────┐
│   Select parameters representing  │  404
│      a patient's vital signs.     │
└─────────────────────────────────┘
             │
             ▼
┌─────────────────────────────────┐
│   Confirm the selected parameters.│  405
└─────────────────────────────────┘
             │
             ▼
┌─────────────────────────────────┐
│    Launch a VSIT client program.  │  406
└─────────────────────────────────┘
             │
             ▼
        ┌──────────┐
        │   End    │  407
        └──────────┘
```

204
VentClient Method

FIG. 5

Start   501

502

Confirm the source Internet Protocol (IP) address.

503

Confirm the port number.

504

Select "append" or "overwrite" data storage for the parameter's data.

505

Select "block" or "running" data averaging for the parameter's data.

506

Select an update latency time for the parameter's data.

507

Select an average latency time for the parameter's data.

508

Select filtering criteria for the parameter's data.

509

Start the processing and the collection of the parameter's data.

End   510

306
Server Process

FIG. 6

```
                    ┌──────────┐
                    │  Start   │      601
                    └──────────┘
                          │
                          ▼
        ┌───────────────────────────────────┐
        │ Acquire the data in a first data format │   602
        │   from a patient monitoring device.     │
        └───────────────────────────────────┘
                          │
                          ▼
        ┌───────────────────────────────────┐
        │        Store the acquired data.         │   603
        └───────────────────────────────────┘
                          │
                          ▼
        ┌───────────────────────────────────┐
        │  Filter the acquired data responsive to │   604
        │    predetermined filtering criteria.    │
        └───────────────────────────────────┘
                          │
                          ▼
        ┌───────────────────────────────────┐
        │         Store the filtered data.        │   605
        └───────────────────────────────────┘
                          │
                          ▼
        ┌───────────────────────────────────┐
        │  Convert the filtered data from the first │  606
        │    data format to a second data format.   │
        └───────────────────────────────────┘
                          │
                          ▼
        ┌───────────────────────────────────┐
        │    Transmit the filtered data over      │   607
        │        a communication path.            │
        └───────────────────────────────────┘
                          │
                          ▼
                    ┌──────────┐
                    │   End    │      608
                    └──────────┘
```

FIG. 7

700
Program Display Window
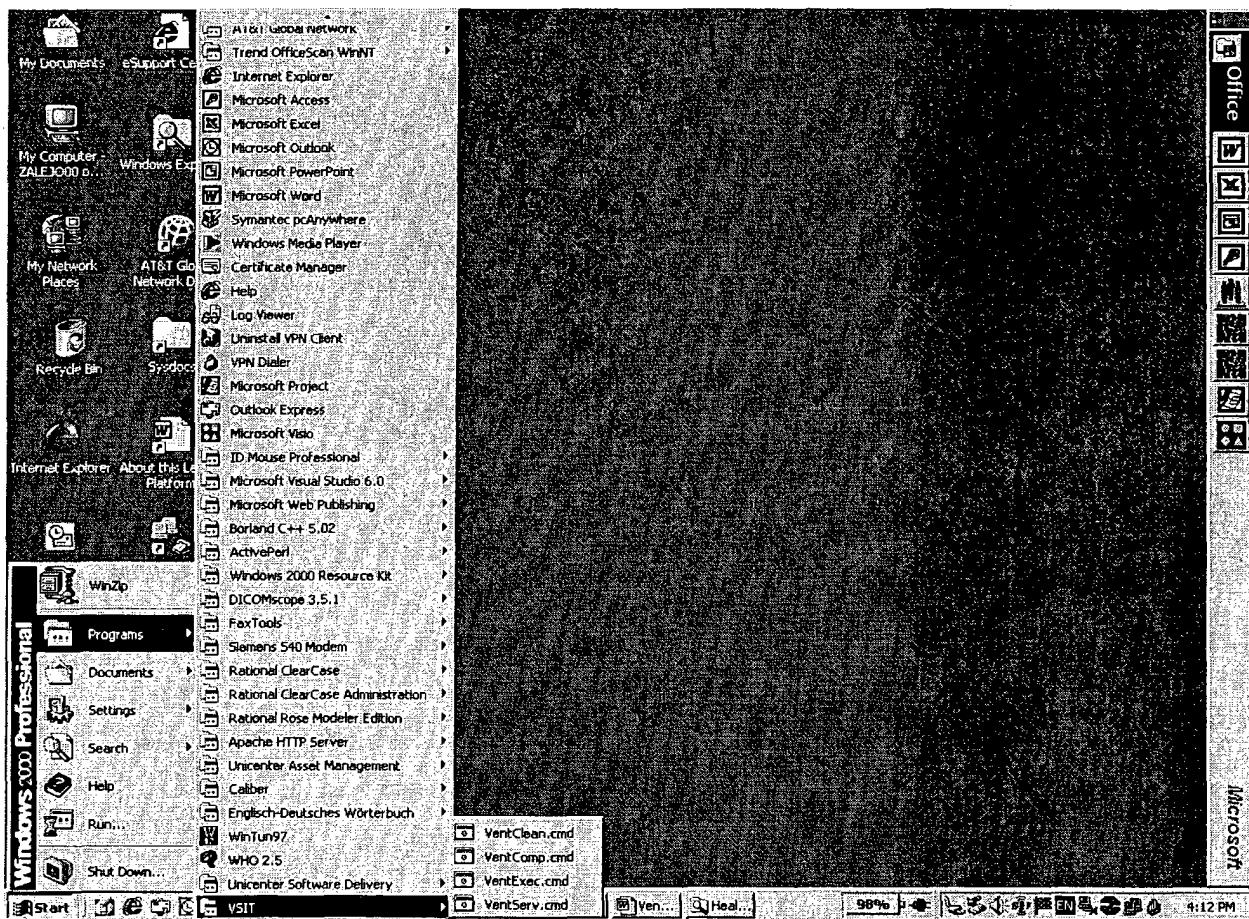
FIG. 8

800
Server Display Window
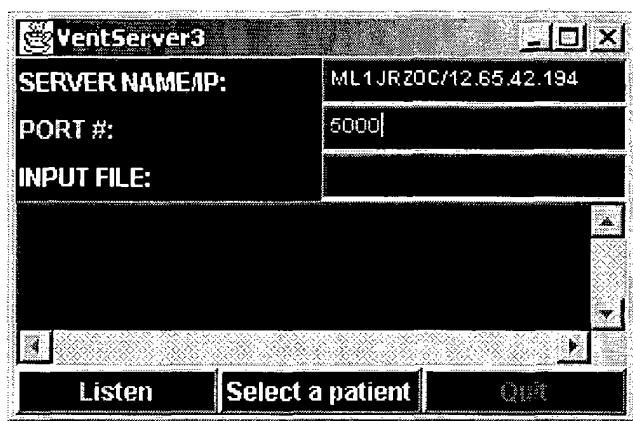
900
Patient Data File Display Window

FIG. 9
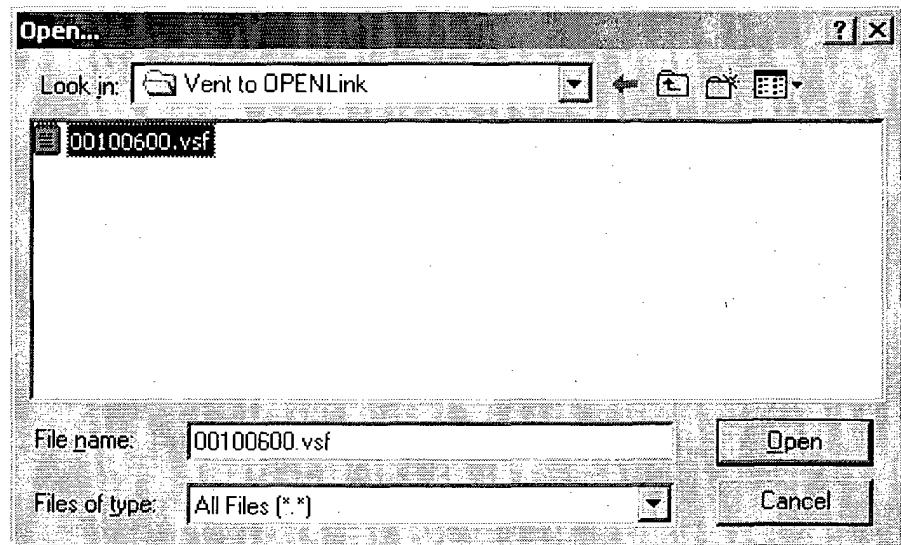
1000
Server Display Window

FIG. 10
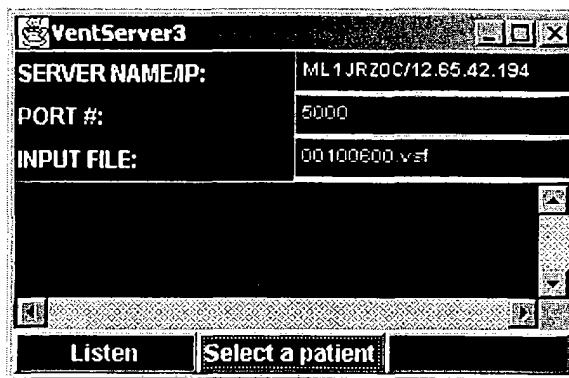
1100
Server Display Window

FIG. 11

1200

Executive Display Window

FIG. 12

Infinity Gateway Vital Parameter Selection Executive

Available vital parameters from Infinity Gateway:

HR
%PACED
ARR
PVC/min
STI
STII
STIII
STaVR
STaVF
STaVL

Selected Parameters for Analysis:

Load client process and continue with automated data collection: Go do it!
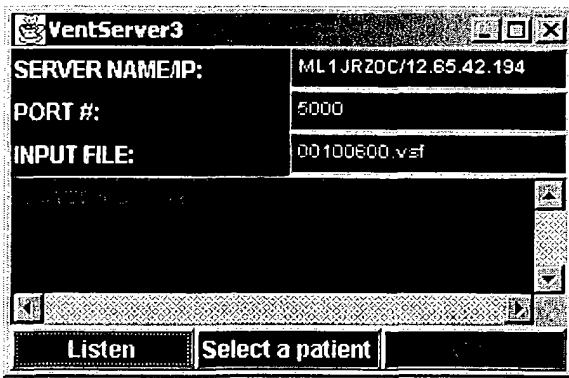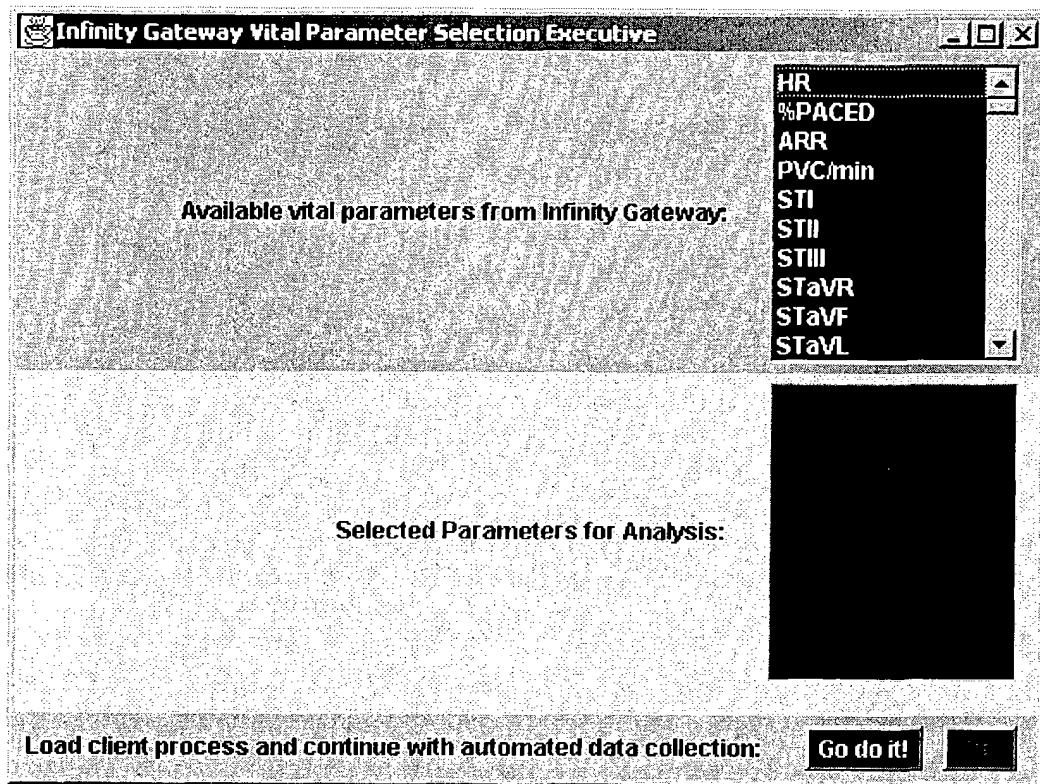
FIG. 13

1300
Executive Display Window
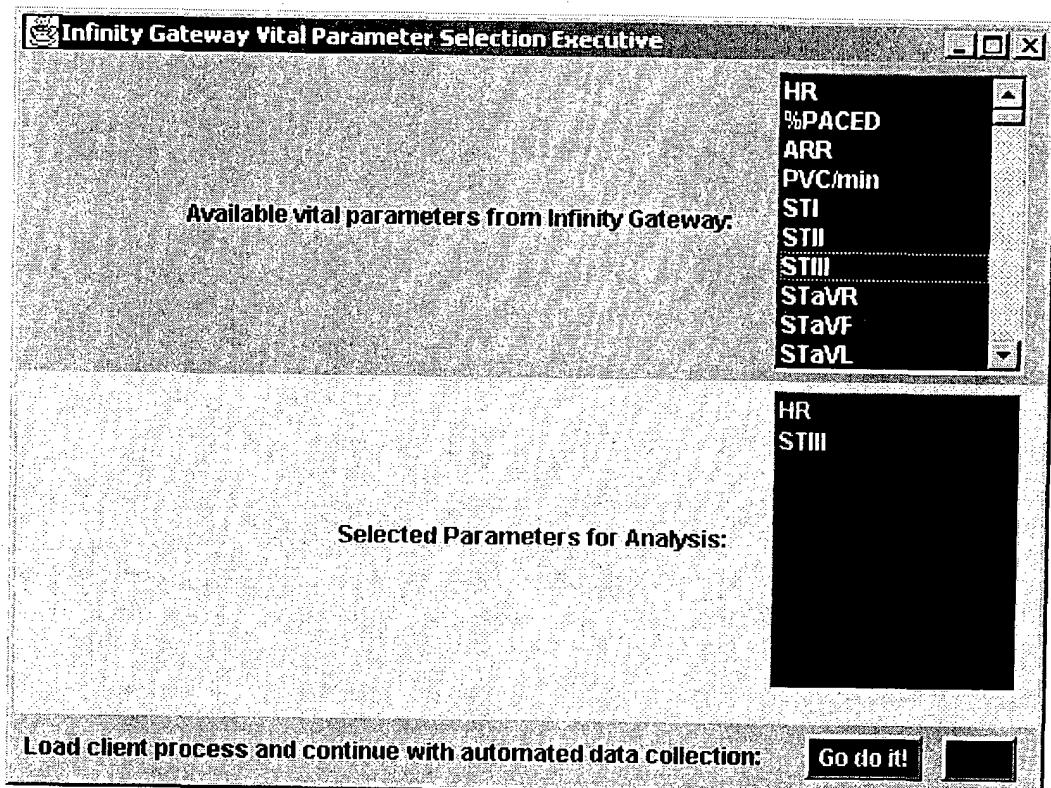
FIG. 14

1400
Client Display Window
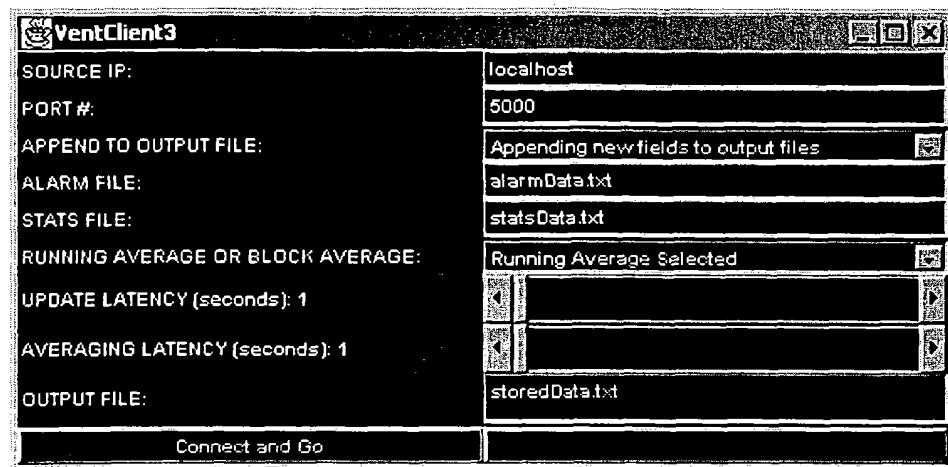
FIG. 15

1500
Client Display Window
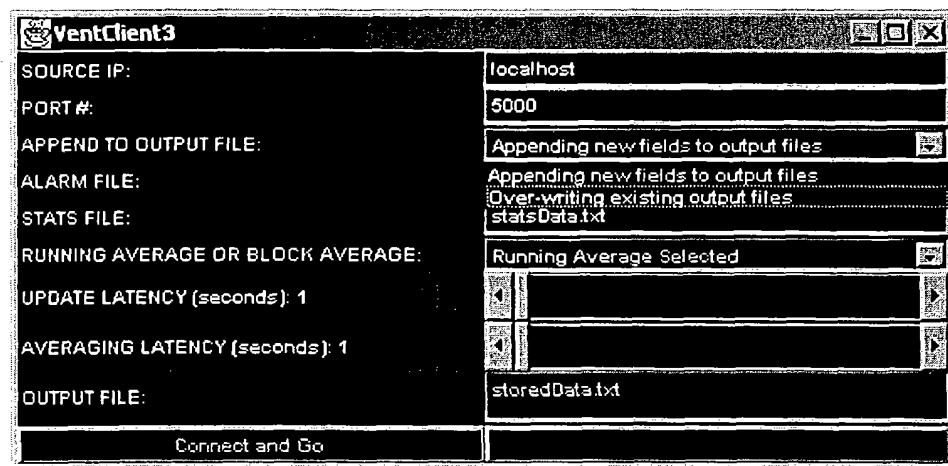
FIG. 16

1600
Client Display Window
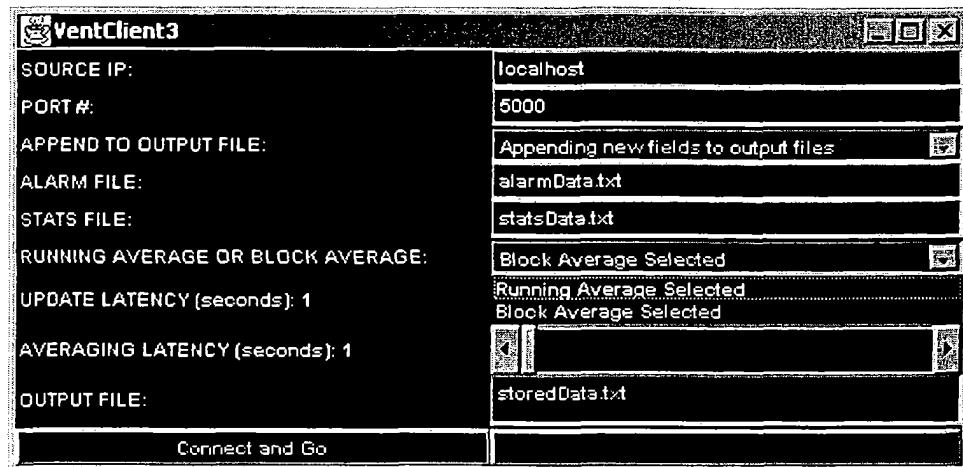
FIG. 17

1700
Client Display Window
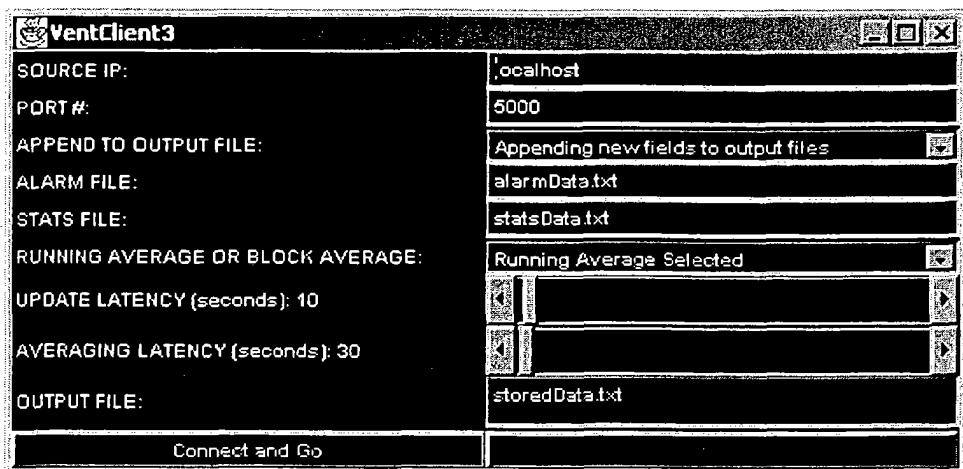
FIG. 18

1800
Client Display Window

FIG. 19
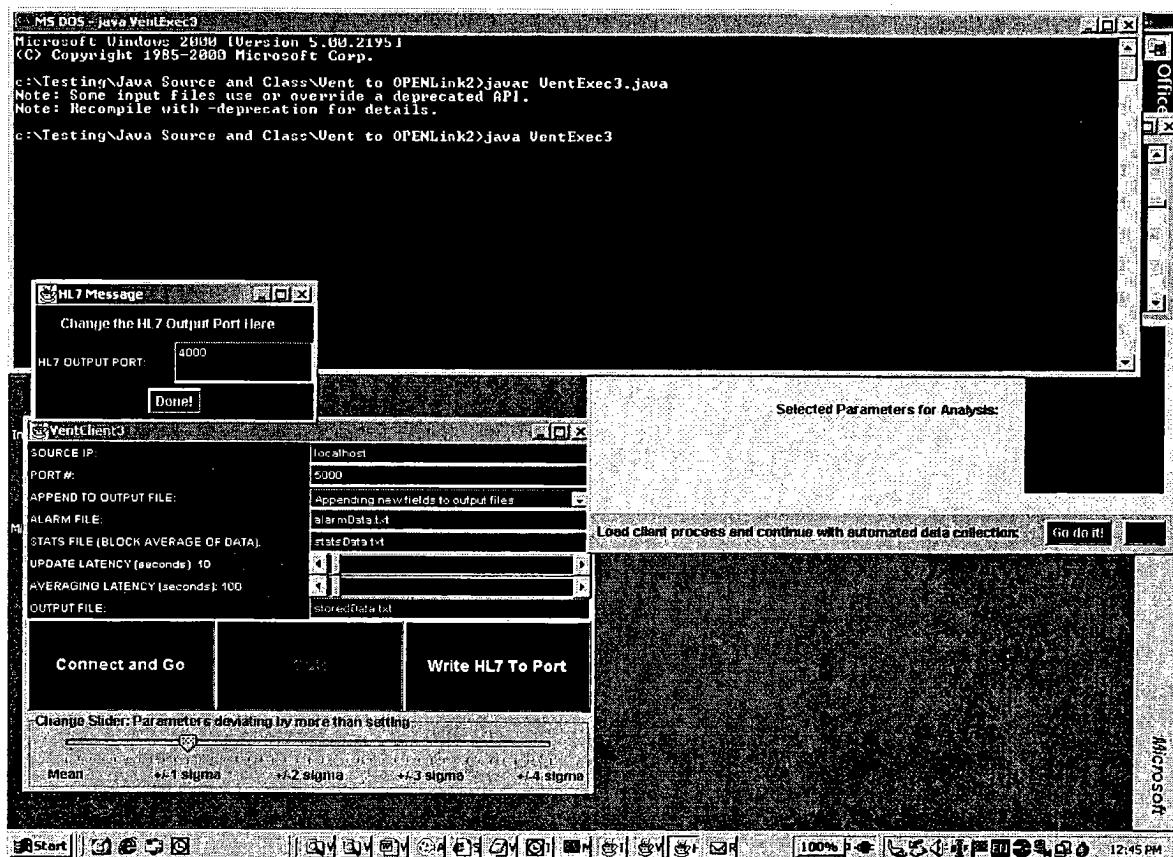
1900
Client Display Window
Having Threshold Selection
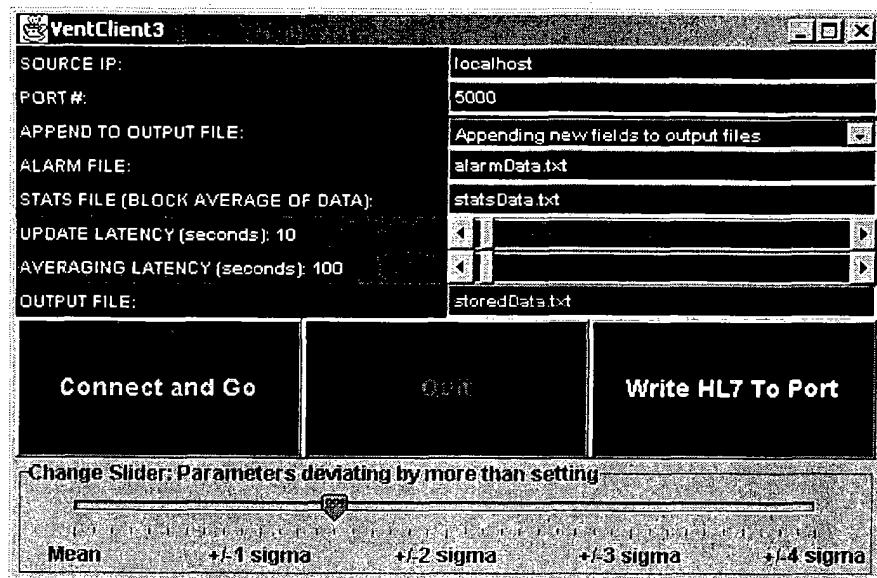
FIG. 20

2000

Clinical User Display Window